Chapter 2: Overview of the Medical Professionals in Malaysia

2.0 Brief Overview of the Medical Professionals in Malaysia

This chapter provides an overview of the healthcare system in Malaysia as well as the medical professionals serving the general public. It also illustrates the importance of healthcare professionals and their development plan as stated in the 8th to 11th Malaysia Plan. In addition, the chapter also provides relevant statistics of the healthcare sector.

2.1 History and Development of Healthcare System/Medical Professionals in Malaysia

Malaysia inherited a health system from the British upon independence in 1957 but with services based mainly in urban areas. Malaysian healthcare system had evolved from a simple single provider system to one of multiple providers which are categorised by public and private sector providers interacting with one another, as well as, third party financiers. Each party interacts with each other in the process to maximise their benefits. The government has provided the major healthcare and healthcare related facilities where all are financed through central taxation. This situation started to change during the 1980s due to growing demand for healthcare following rising incomes, urbanisation and the expansion in the middle classes (Chee & Barraclough, 2007).

Public dental services prior to independence were run by British dentists in the large hospitals assisted by locally qualified dentists who also visited districts and towns. Further, the private dental care was provided by about 450 mainly locally trained practitioners.

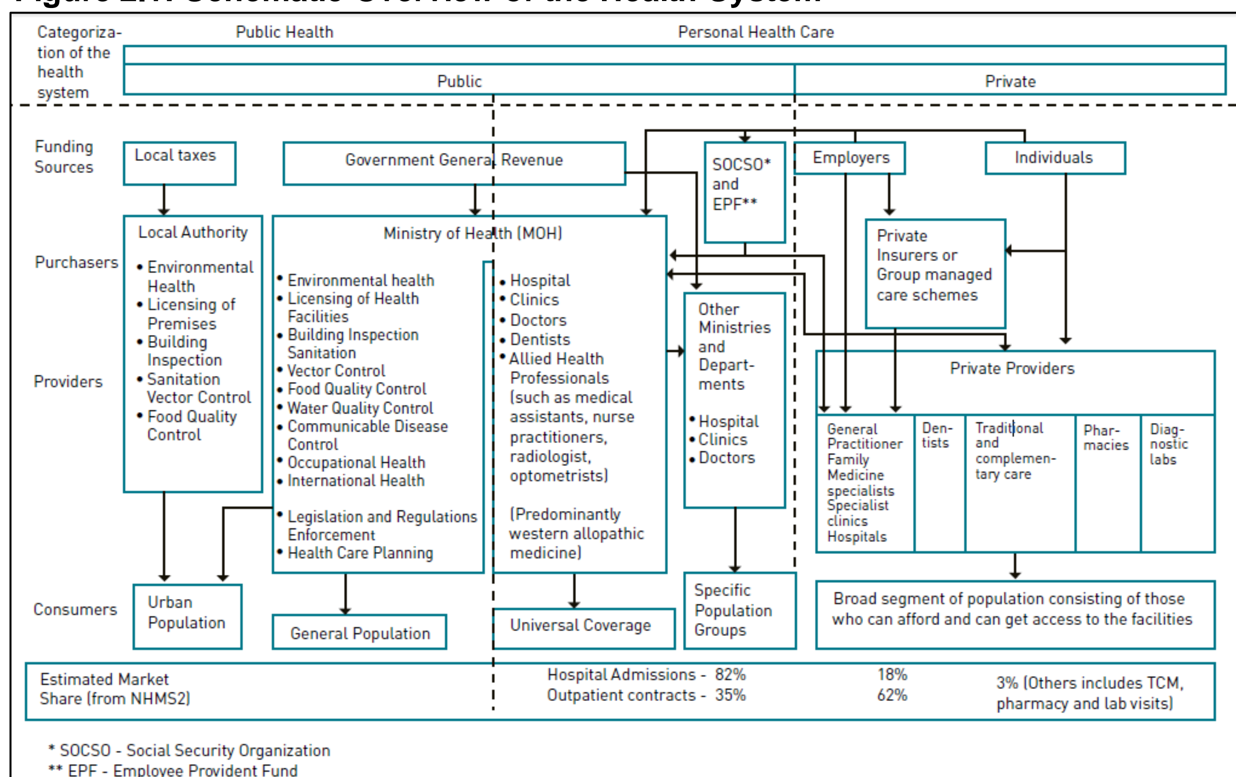
Pharmacy services in Malaysia came into existence in 1951. In 1955, the numbers of pharmacist was around 30[1]. To enhance its role The Government Pharmaceutical Laboratories and Stores were established in 1964 in Petaling Jaya to purchase and manufacture pharmaceuticals for MOH services. However, the absence of

[1] Malaysian Pharmaceutical Society (2016) History of MPS, available at: http://www.mps.org.my/index.cfm?&menuid=84

dispensing right has limited the community pharmacist's professional roles to deliver pharmaceutical care, optimize their clinical knowledge and utilize their skills[2].

Nursing practice in the pre-war period in Malaya then was carried out by nurses who received "on the job training". After Independence, health services became mainly a central government responsibility with delegation of service delivery through state and district health administrations[3]. The first private nursing school in Malaysia was established at Assunta Hospital, Petaling Jaya.

Figure 2.1: Schematic Overview of the Health System



Source: Hussein RH, Asia Pacific Region Country Health Financing Profiles: Malaysia, Institute for Health Systems Research

A schematic overview of the health system is shown in Figure 2-1. The MOH offers a comprehensive range of services, including health promotion, disease prevention, curative and rehabilitative care delivered through clinics and hospitals, while special institutions provide long-term care. In addition, several other government ministries

[2] Mohd A.Hassali, Vivienne M. S. Li, Ooi G. See (2014), Pharmacy Practice in Malaysia, Journal of Pharmacy Practice and Research.

[3] 2013, Western Pacific Region Nursing and Midwifery Databank, available at: http://www.wpro.who.int/hrh/about/nursing_midwifery/db_malaysia2013.pdf

provide health-related services. The private health sector provides health services, mainly in urban areas, through physician clinics and private hospitals with a focus on curative care. Private companies run diagnostic laboratories and some ambulance services. Non-government organizations provide some health services for particular groups. Traditional medicine, such as Chinese and Malay practitioners and products, is used by large sections of the population.

2.1.1 Malaysia Plan

In the mid 1980's, the Malaysian government initiated a program on economic liberalisation and deregulation that included a comprehensive privatisation policy, in connection with the concept of "Malaysia Incorporated". This concept sees the Government as the provider of an enabling environment - infrastructure, deregulation, liberalisation and macroeconomic management; and the private sector as the main engine of growth (Economic Planning Unit, 1985, 1991). Gomez and Jomo (1999) and Chee (2006) argue that the government was influenced strongly by advisors from the Thatcher government of United Kingdom and the World Bank to introduce privatisation as the vehicle to reduce government expenditure.

The Mid-Term Review of the Sixth Malaysian Plan 1991-1995 stated that: While the government will still remain a provider of basic health services, the role of the Ministry of Health will gradually shifts towards more policymaking and regulatory aspects, as well as, setting standards to ensure quality, affordability and appropriateness of care. At the same time the Ministry of Health will ensure an equitable distribution in the provision of health services and health manpower between the public and private sectors. (Malaysia Plan 1993:244)

Hence, in the following Seventh Malaysian Plan (1996-2000) it was stated that the Government "will gradually reduce its role in the provision of health services and increase its regulatory and enforcement functions" (Malaysia 1996:544). Following strong promotion by the government towards the private healthcare particularly since the mid-1980s has resulted in the steady rise of private hospitals. A number of large Malaysian corporations and companies were set up by medical specialists, including through the involvement of foreign investors who invested in private hospitals. Most

of the services in the private hospitals are paid from out-of-pocket bills. In addition, the government also launched Government Linked Companies (GLCs) that, inter alia, acquired shares or started large private hospitals[4].

The Government has introduced and implemented various policies and objectives in successive Malaysian Plans. Table 2.1 describes the conditions before the implementation of each Plan and the policies undertaken by the Government to develop human capital in Malaysia during the period of each Plan.

2.1.2 The Plan and Healthcare Professionals Development Policy-Thrusts

Table 2.1: The Health Professionals Development Policies from various Malaysian Plan

The Plan	Health Professionals' Development Policies
8th Malaysian Plan (2001-2005)	- Expansion of public sector training institutions and the outsourcing of training. In addition, Universiti Putra Malaysia, Universiti Malaysia Sarawak and Universiti Islam Antarabangsa will expand their medical faculties and teaching hospital facilities. The Universiti Sains Malaysia will also establish a faculty of dentistry in Kubang Kerian, Kelantan. The public and private medical schools are expected to produce 5,374 graduates in medicine, 708 in dentistry and 1,855 in pharmacy, during the Plan period. About 200 students a year will continue to be sent overseas to complement training by local institutions. - A total of five new institutions to train allied health professionals will be established in Alor Setar, Kedah, Johor Bahru, Johor, Kota Kinabalu, Sabah, Kuching, Sarawak and Sungai Buloh, Selangor. Inservice training for the allied health professionals will be enhanced at the primary, secondary and tertiary care levels as well as in the teaching hospitals, during the Plan period. Private sector hospitals will also be encouraged to set up their own training facilities as well as expand existing ones to meet their manpower requirements. Greater emphasis will be given to the post-basic training of allied health professionals in areas such as anaesthesiology, paediatrics, oncology and radiotherapy.

[4] University of Malaya, Student's Repository, Healthcare in Malaysia

The Plan	Health Professionals' Development Policies
	- Efforts will be undertaken to encourage all categories of health manpower to remain in the public sector. In this regard, the Government will further increase the supply of health manpower as well as continue to review and improve the terms and conditions of service for health and allied health professionals. In addition, a more conducive working environment will be provided by improving and upgrading the facilities in the hospitals and clinics. In addition, greater opportunities will be provided for skills upgrading and postgraduate training, particularly in areas such as cardiothoracic surgery, rehabilitative medicine and neurosurgery.
9th Malaysian Plan (2006-2010)	- An allocation of RM1 billion will be provided. A blueprint will be formulated to improve human resource development as well as address issues relating to the acquisition, training, supply, utilisation and deployment of health personnel. - Collaboration mechanisms will be instituted with relevant government agencies and the private sector to increase training capacities. In this regard, selected public hospitals will also be utilised as teaching hospitals. In addition, students will be sent overseas to complement training undertaken by local institutions. - The continuous professional development (CPD) programme will be further strengthened through the provision of online facilities to develop the skills and competencies of medical personnel. CPD activities will be monitored to ensure enhanced quality, professionalism and will be matched with the required competency tests. In addition, efforts will be undertaken to enhance the knowledge and competencies of medical personnel in new areas of specialisation and subspecialties such as vaccine development and health-related disaster management, through in-service training. Priority will also be given to ensuring sufficient supply of trained personnel to address the behavioural component of lifestyle issues.

<table>
<tr><th>The Plan</th><th>Health Professionals’ Development Policies</th></tr>
<tr><td></td><td>- The completion of seven training colleges for AHSP during the Plan period will enable an additional 25,000 personnel to be trained. To further improve and upgrade the skills and knowledge of trained personnel, post basic training in new and priority disciplines will be conducted. In addition, the development of soft skills, including the inculcation of good ethics, values as well as a caring attitude will be given greater emphasis. Measures will also be undertaken to increase the number of tutors as well as upgrade their skills.</td></tr>
<tr><td>10th Malaysian Plan (2011-present)</td><td>Investments in human resources for health (HRH) remain a central component of the healthcare system.

- The doctor-population ratio is expected to improve from 1:1,380 in 2005 to 1:597 in 2015, while the nurse-population ratio is also expected to increase from 1:592 to 1:200 during the same period. In order to cope with the increased demand for training, the Government will increasingly utilise specialists from the private sector for training, as 60% of total specialists available in the country are in the private sector.
- In addition, the Government will continue to outsource and collaborate with private training institutions for the training of allied health personnel. Other efforts to meet the rising demand for quality healthcare will focus on the following efforts:
• Increasing the specialist training allocation for doctors and other healthcare professionals;
• Improving and expanding post-basic training for nurses and allied healthcare personnel;
• Addressing personnel retention through provision of better remuneration, promotional opportunities and steps to provide greater job satisfaction; and
• Improving the quality of private healthcare professionals through credentialing, privileging and structured training.</td></tr>
</table>

The Plan	Health Professionals' Development Policies
11th Malaysian Plan (2016-2020)	Under Chapter 4, wellbeing remains a priority thrust for realising Vision 2020. The Government will accelerate efforts to achieve universal access to quality healthcare by targeting underserved areas, and increasing capacity of both facilities and healthcare personnel. - Under focus area A, Achieving Universal Access to Quality Healthcare, Governments remain committed to achieving universal access to quality healthcare by continuing efforts to improve the fundamentals of the health systems. Under this focus area, the highlighted strategies are as follows: • Strategy A1 : Inclusiveness- Enhancing targeted support, particularly for underserved communities. The extension of services to poor and low-income households, Orang Asli in Peninsular Malaysia, and rural and remote areas in Sabah and Sarawak will include the deployment of more specialist and skilled personnel. • Strategy A2 : Improving System Delivery for Better Health Outcomes. The Government will implement the hospital cluster concept in selected locations, where hospitals within the same geographical location will work as one unit, sharing resources such as assets, amenities and human resource. • Strategy A3 : Expanding Capacity to Increase Accessibility. The private sector will be encouraged to collaborate and set up more healthcare facilities that cater to the needs of low and middle income household. • Strategy A4 : Intensifying Collaboration with Private Sector and NGO to Increase Health Awareness. Such collaboration will span a broad range of initiatives, from community health and prevention programmes, to research and development efforts between industries, universities and research institutions. - Doctor to population ratio is expected to improve to1:400 in the 11th Malaysia Plan instead of 1: 597 in 10th Malaysia Plan.

The Plan	Health Professionals' Development Policies
	- 2.3 hospitals beds per 1000 population that includes public and private hospitals, maternity and nursing homes, hospices and ambulatory care centres.

2.2 The Population, life expectancy and mortality rates of Malaysian

Malaysia is classified by the World Bank as an upper middle-income country. In 2014, with the total land area is 330, 289 sq. km[5] the total population in the country is 30.3 million[6]. Although, the annual population growth rate over the years have declined to around 1.6% in 2013 (refer to table 2-1), the growth rate is similar with other neighbouring countries like Singapore (1.6%), Brunei Darussalam (1.3%), Philippines (1.7%) and Indonesia (1.2%). Malaysia is undergoing a demographic transition as the total fertility rate[7] has fallen to 2.1 births per woman, the population proportion below age of 15 has fallen to 26% and those aged 65 years and above are increasing. This is consistent with the increase in life expectancy at birth over the years.

Table 2.2: Population distribution and Vital Statistics

Indicator[1]	2000	2005	2010	2011	2012[p]	2013[e]	2014[2]
Total population (millions)	23.5	26.0	28.5	29.1	29.5	29.9	30.4
Population aged 0-14 (% of total)	33.1	32.6	27.4	26.9	26.4	26.0	25.6
Population aged 15-64 (% of total)	62.9	63	67.6	68.0	68.3	68.5	68.7
Population aged 65 years and above (% of total)	4.0	4.3	5.0	5.1	5.3	5.5	5.7
Average annual population growth rate (%)	2.4	2.1	1.8	1.3	1.3	1.3	
Crude birth rate (per 1000 population)	24.5	19.6	17.2	17.6	17.2	17.2	16.9

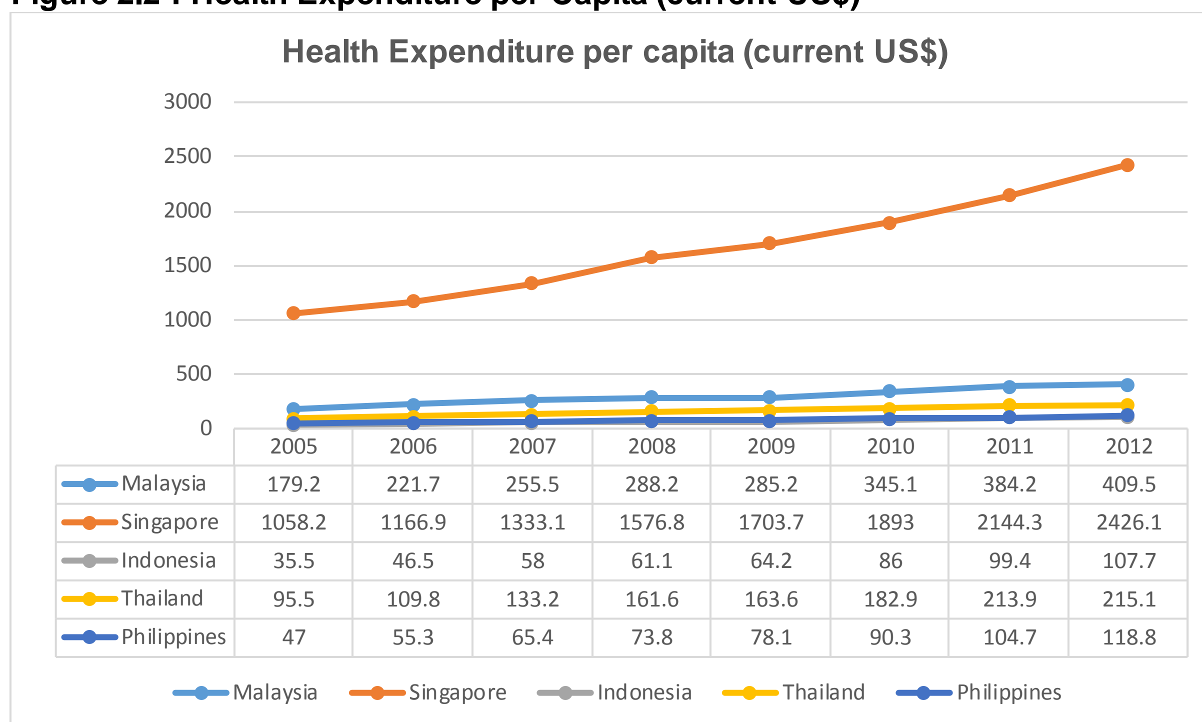
[5] Department of Survey and Mapping, Malaysia
[6] Department of Statistics, Malaysia
[7] Total Fertility Rate refers to the average number of children which would be born if women survived to the end of their reproductive period and throughout that period are subject to the schedule of age-specific fertility rates for the given year.

Crude death rate (per 1000 population)	4.4	4.4	4.6	4.7	4.6	4.7	4.7
Total fertility rate	3.0	2.4					2.1
Life expectancy at birth - Male - Female	 70.2 75.0	 70.6 76.4	74.08	74.32	74.54	74.72	 72.5 77.2
p: preliminary data e: estimated data 1: Data derived from Ministry of Health 2: Data derived from Department of Statistics							

The 10th Malaysia Plan indicated that Malaysia has done well in extending affordable basic healthcare services to all citizens. Malaysia healthcare system was also highlighted as one that has been relatively successful in providing equitable healthcare in terms of targeting public health subsidies towards the poor.

The World Bank statistics in 2012 (Chart 2-1) shows that in Malaysia, the total health expenditure per capita was US$409.5 per person as compared to countries like Singapore at US$2,426.1 per person and the United States at US$8,895.1.

Figure 2.2 : Health Expenditure per Capita (current US$)



	2005	2006	2007	2008	2009	2010	2011	2012
Malaysia	179.2	221.7	255.5	288.2	285.2	345.1	384.2	409.5
Singapore	1058.2	1166.9	1333.1	1576.8	1703.7	1893	2144.3	2426.1
Indonesia	35.5	46.5	58	61.1	64.2	86	99.4	107.7
Thailand	95.5	109.8	133.2	161.6	163.6	182.9	213.9	215.1
Philippines	47	55.3	65.4	73.8	78.1	90.3	104.7	118.8

Source: The World Bank, 2015

In relation to above, the total expenditure on health in ringgit Malaysia shows a gradual increase over the years. In 2011, the expenditure from both public and private healthcare are amounted to RM37,871 million as compared to RM35,148 million in 2008. The Malaysia's public health system is financed mainly through general revenue and taxation collected by the federal government, while private sector is funded through private health insurance and out-of-pocket payments from consumers (WHO, 2013)[8]. The health expenditure has remained predominantly public spending, representing 52.3% and 54.7% of total health expenditure in 2011 and 2010 respectively.

Managed Care Organisation (MCO) has existed since 1995. They form as third party payers within the healthcare industry. These MCO will be discussed in Chapter 7.

[8] World Health Organisation (WHO) on behalf of Asia Pacific Observatory on Health Systems and Policies (2013) Malaysia Health System Review

2.3 Health Human Resources

Human capital and health improvement programmes are of central importance towards sustainable development and economic growth in any country. The distribution of doctors or other healthcare resources are mostly at the public hospitals rather than in the private sectors. Throughout the years, registered nurses are the largest group of medical professionals. The statistics by the Ministry of Health in 2013 shown that almost 50% of medical professionals in Malaysia are represented by nurses (including the community and dental nurses), totalling of 116, 379 nurses.

Table 2.3: Health professionals in the public and private sector, 2013

Health professionals	Public	Private	Total	Profession: population ratio
Doctors[a]	35,219	11,697	46,916	1:633
Dentists	3,256	1,979	5,235	1:5,676
Pharmacists	6,752	3,325	10,077	1:2,949
Opticians	-	3,060	3,060	1: 9,711
Optometrists	308	1,015	1,323	1: 22,460
Asst. Medical Officers	11,089	1,428	12,517	1: 2,374
Nurses	62,514	26,653	89,167	1: 333
Pharmacy Assistant	4,294	552	4,846	-
Asst. Environmental Health Officers	4,287	n.a	4,287	-
Medical Lab. Technologists	6,108	n.a	6,108	-
Occupational Therapists	858	n.a	858	-
Physiotherapists	1,178	n.a	1,178	-
Radiographers (Diagnostic & Therapist)	2,699	n.a	2,699	-
Dental Nurses[b]	2,793	-	2,793	-
Community Nurses[c]	24,152	267	24,419	-
Dental Technologists	1,000	765	1,765	-
Dental Surgery Assistants	3,903	39	3,942	-

Traditional & Complementary Medical Practitioners[d]	-	-	12,532	

Source: Ministry of Health, 2014

a: Includes House Officers

b: Equivalent to Dental Therapists, provide public sector services for population under 18 years of age

c: Includes Midwives

d: refers to registration of local and foreign practitioners

While the ratio of profession to population shows that the gap is being reduced throughout the years many studies cited that Malaysian health system is being seriously constrained by shortages of health professionals[9]. The Country Health Plan: 10th Malaysia Plan stated that adequate workforce with the right mix of numbers and skills remain elusive.

Table 2.4 : The ratio of health professionals to population, 2008 - 2013

Profession	Profession: Population Ratio			
	2008[1]	2010[2]	2012[3]	2013[4]
Doctors	1:1,105	1:859	1:758	1: 633
Dentists	1:7,618	1:7,437	1:6,436	1: 5,676
Pharmacists	1:4,335	1:3,652	1:3,039	1: 2,949
Asst. Medical Officers	1: 3,054	1:2,738	1:2,477	1: 2,374
Nurses	1:512	1:410	1:345	1: 333

Sources:

1: Health Facts 2008, Ministry of Health Malaysia

2: Health Facts 2010, Ministry of Health Malaysia

3: Health Facts 2013, Ministry of Health Malaysia

4: Health Facts 2014, Ministry of Health Malaysia

[9] World Health Organisation (WHO) on behalf of Asia Pacific Observatory on Health Systems and Policies (2013) Malaysia Health System Review

The country is also aligning its effort to meet the WHO 1:600 ratio between doctors to population in addition to establishing the country as the preferred destination of health tourism in Asia. Health Tourism contributed RM688 million revenue in 2013 and is expected to double by 2020. The services sector, in particular medical professional services, plays an important role in supporting the growth. The Annual Global Retirement Index for 2014 which voted Malaysia among the top five best places to retire, also poses a potential increase in the demand for medical professionals which spawns employment opportunities for these professionals, (source: International Living, NST online 11/01/2015)

Table 2-3 indicates that the most favorable ratio appears in the number of nurses to population which is 1: 333. The ratio between doctors to population has improved significantly from 1: 1105 in 2008 to 1: 633 in 2013.

The number of medical professionals in the country is also growing with 5,000 medical graduates entering the medical workforce each year. In addition to that, Malaysia also gets 1,000 specialised medical experts a year, being part of the nation's aim to provide 1 doctor for every 400 population. There are around 221,000 health professionals in Malaysia as shown in Table 2-2 above, not including the Traditional & Complementary Medical Practitioners.

The number of private hospital is also expected to increase from 225 in 2012 to 239 in 2018[10]. The private hospital services market in Malaysia earned revenues of RM7.5 billion (US$2.3 billion) in 2011 and is expected to reach RM13.8 billion (US$ 4.2) in 2015. The revenue for private hospitals has almost doubled in four years. Approximately 10% of the private healthcare revenues are from medical tourists[11].

In closing the gap between health professionals with the Malaysian, the Government had established collaboration between the anchor institutions from education sector and allied health industry (*Economic Transformation Programme 2011– EPP 8: Building a Health Sciences Education Discipline Cluster*. During the first phase,

[10] Frost & Sullivan (2013) Malaysian healthcare sector to reach US$3.65 billion in 2018, Malaysian Journal of Nursing Online News Portal, Available at: http://mjn-e-news.com.my/may2013/top1.html (Accessed on 24 February 2015)
[11] Nadaraj, V., (2014) Malaysia's Healthcare Tourism: The Path is Paved with Gold, The Establishment Post, Available at: http://www.establishmentpost.com/malaysias-healthcare-tourism-path-paved-gold/ (Accessed on 24 February 2015)

these anchor institutions were responsible for building partnerships with smaller training colleges and developing a portfolio of joint programme offerings from diplomas to postgraduate degrees, as well as setting up joint investment vehicles to pool private investments to develop critical infrastructure like clinical labs and teaching hospitals.

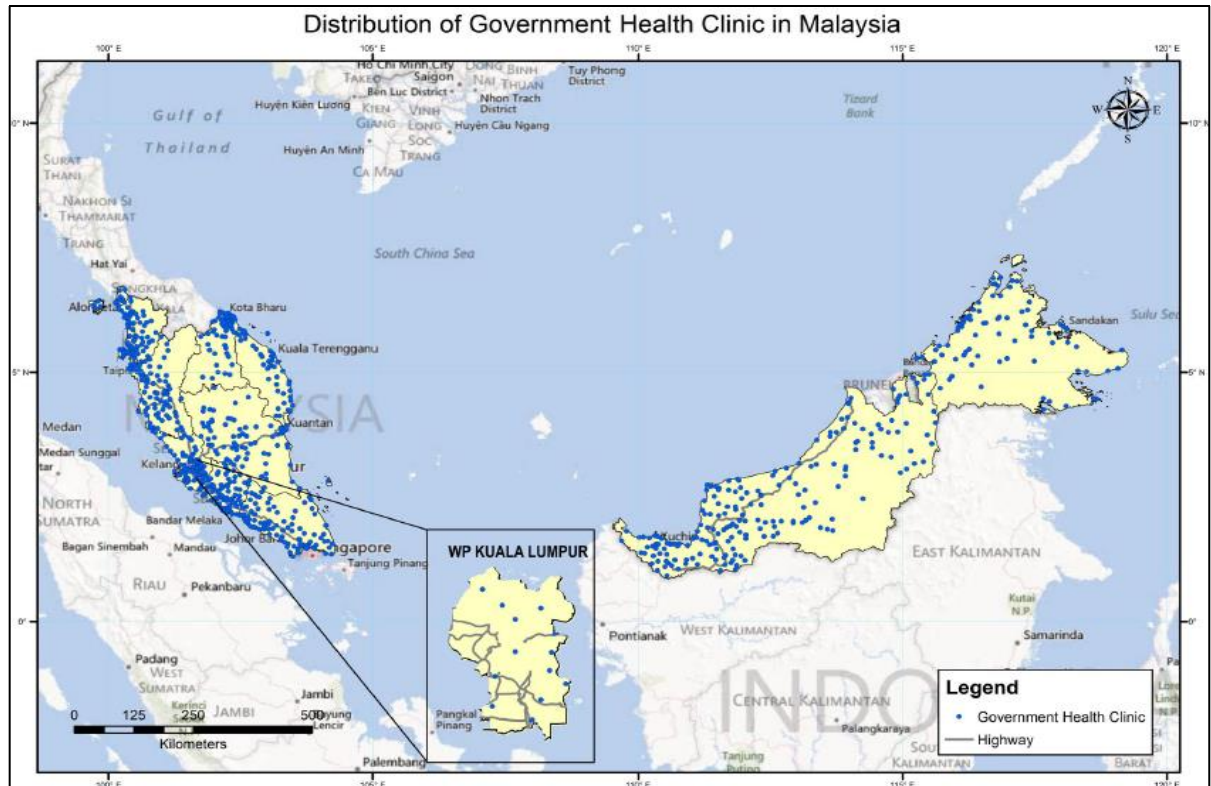
During the second phase, from 2012 to the end of 2013, the cluster was broadened to include any institute that meets the quality standard, including international educational institutions to health service providers. The Ministry of Health and Ministry of Higher Education, MOHE had envisaged to support the growth of the cluster through a number of incentives, for example facilitating the export of health care professionals through government-to-government agreements, allowing the increased use of human-patient simulators as a partial (20 per cent) substitute for clinical postings and restructuring the approval process for student quotas so that institutions with good track records can be approved for increases in student numbers based on planned capital expenditure instead of finished infrastructure.

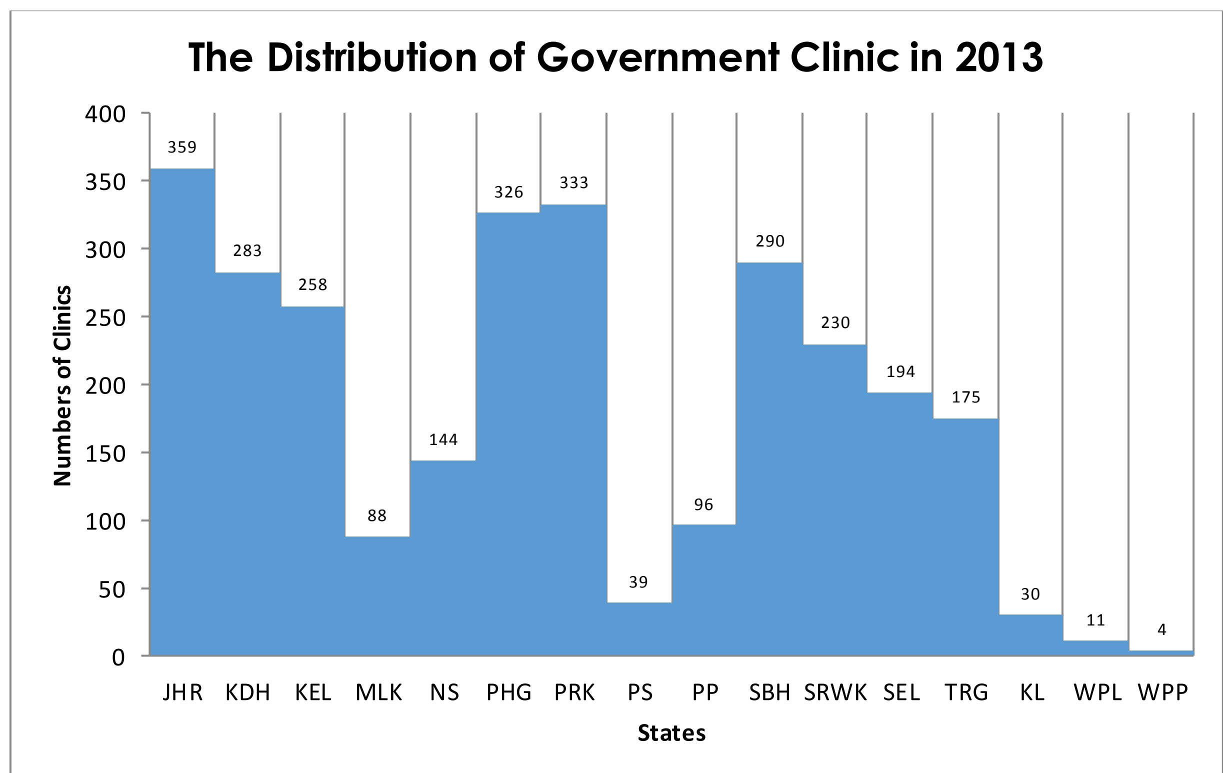
2.3.1 Healthcare Facilities

The healthcare facilities are heavily offered by the public sector and are distributed throughout the country while the facilities offered by the private sector are highly concentrated in the urban areas due to the demand by the affluent community[12]. Figure below shows that in 2010, 68% of private hospitals (173 hospitals) are located at Selangor, Kuala Lumpur, Pulau Pinang and Johor Bharu while, the highest locations for public hospitals are at Sabah and Sarawak.

[12] S. Thomas et al., (2011) Health care delivery in Malaysia: changes, challenges and champions; Journal of Public Health in Africa 2011; 2:e23

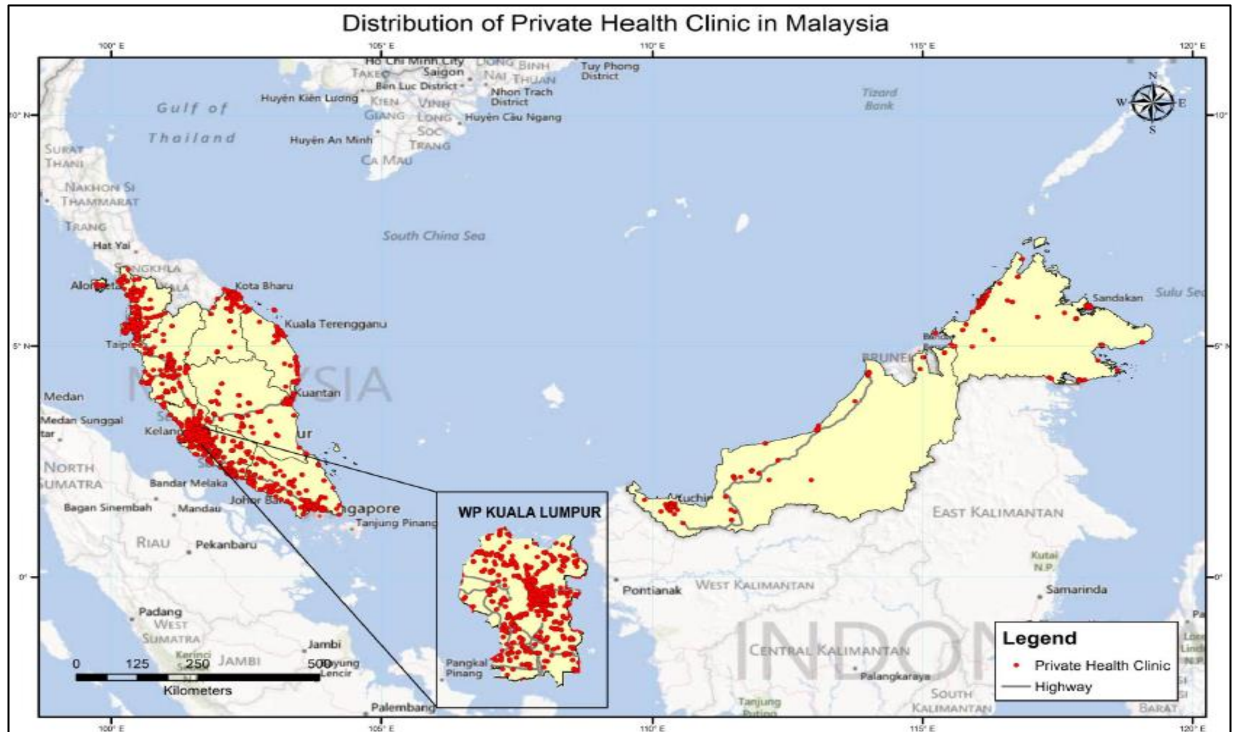
Figure 2.3 : The Distribution of Government Health Clinic in Malaysia 2013

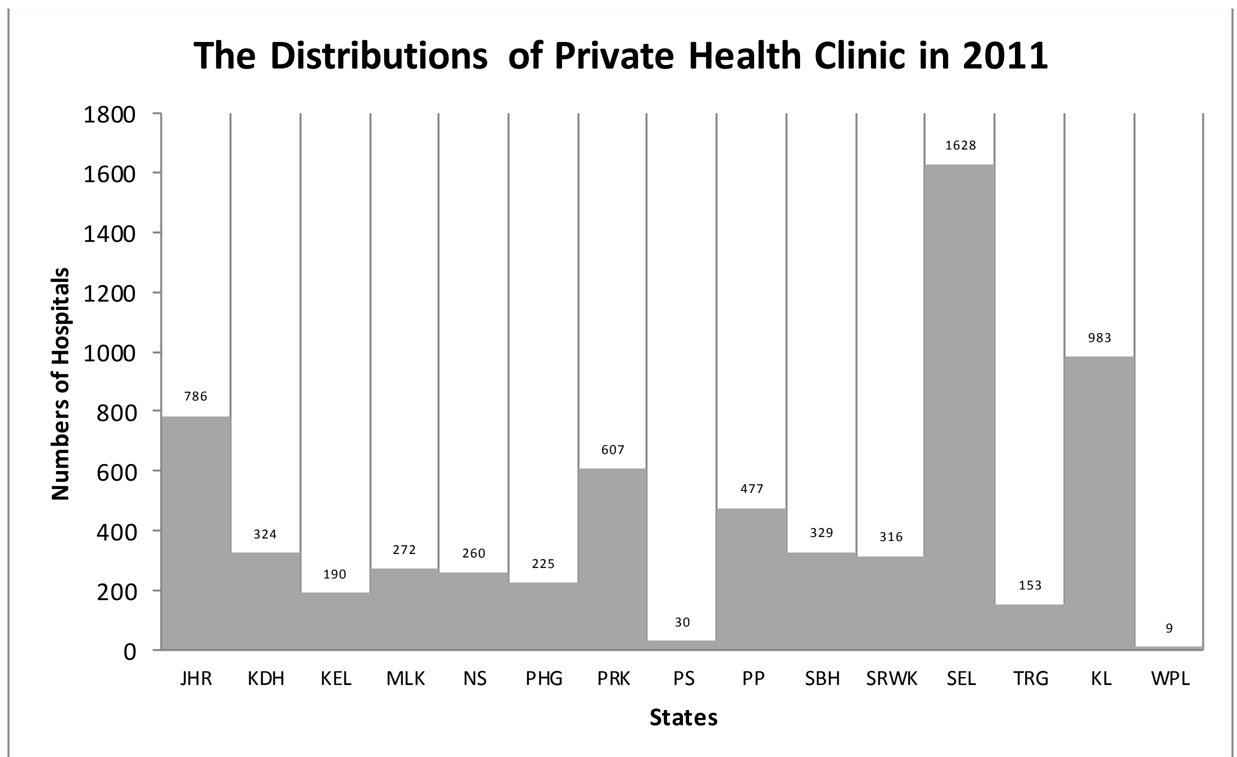




Source: MOH

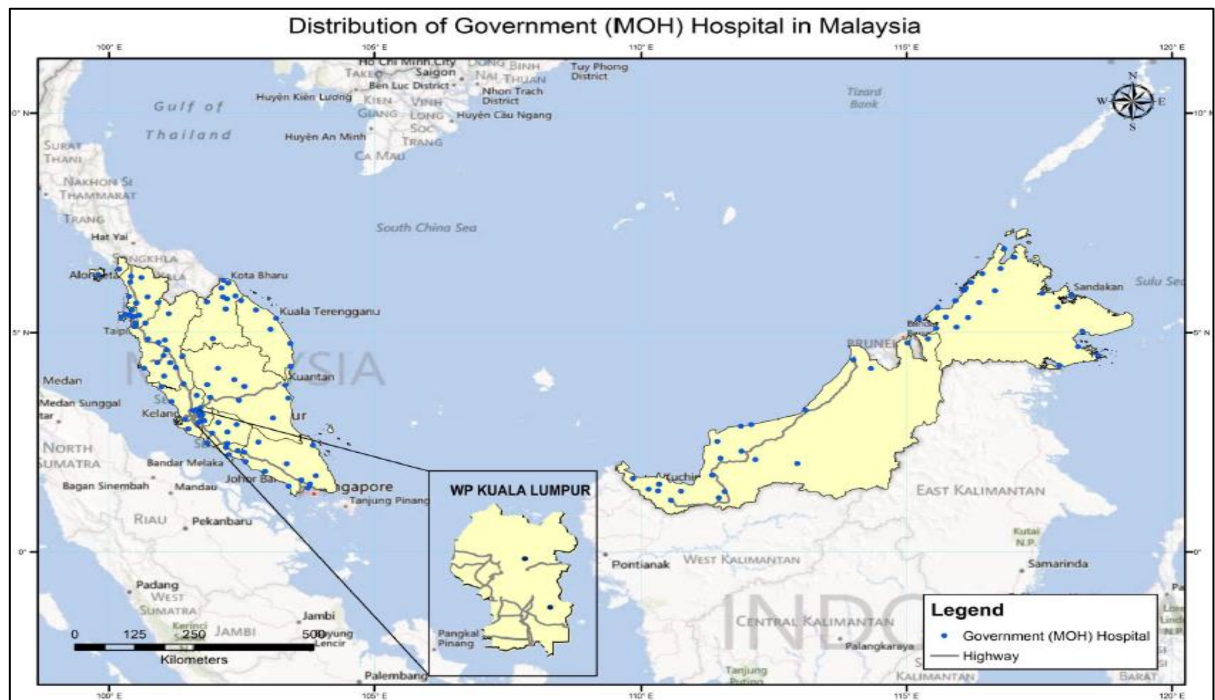
Figure 2.4 : The Distribution of Private Health Clinic in Malaysia 2011

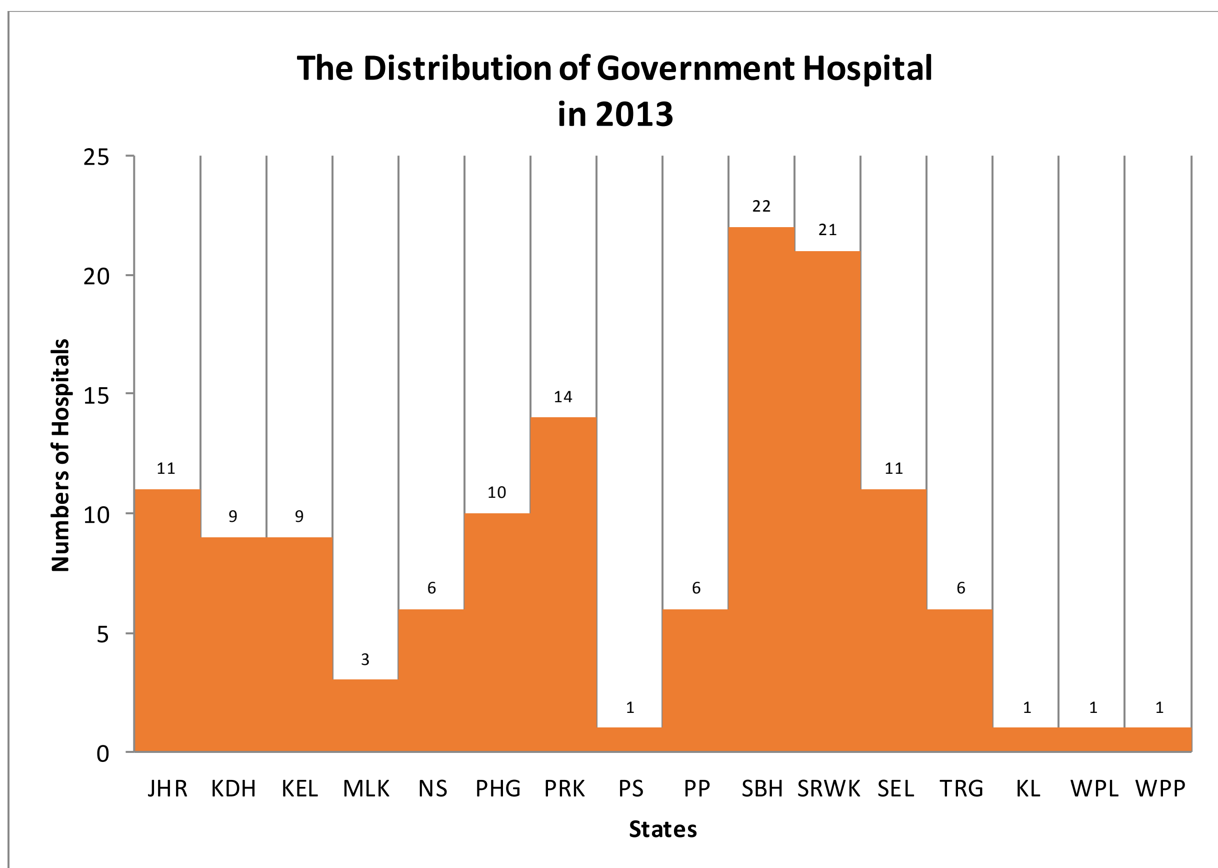




Source : KKLW

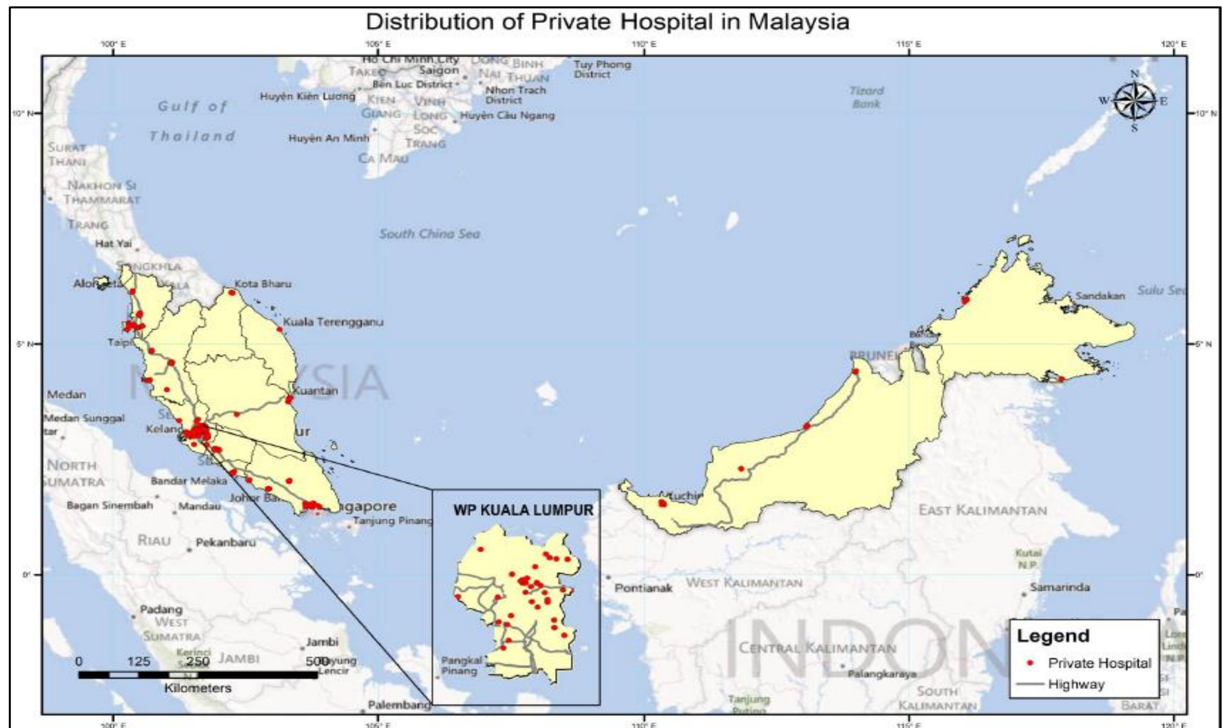
Figure 2.5 : The Distribution of Government Hospital (MOH) in Malaysia 2013

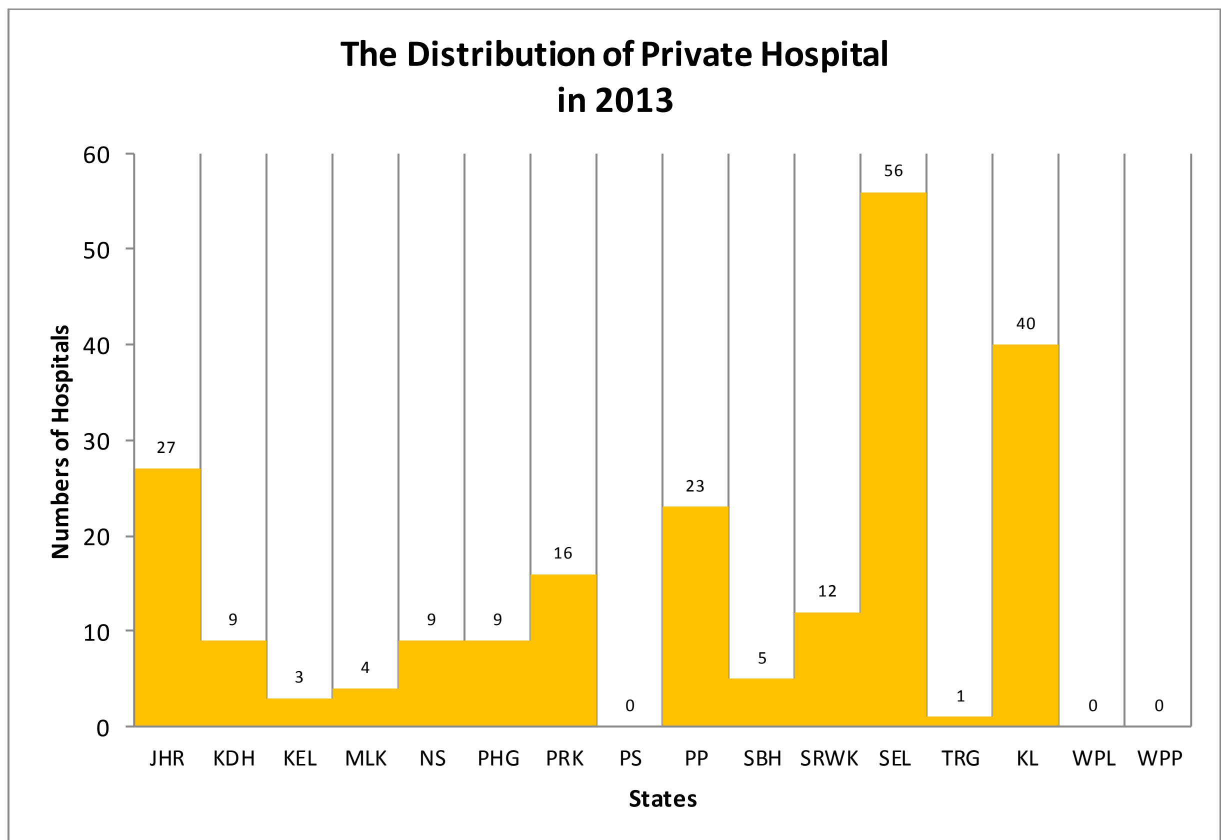




Source: MOH

Figure 2.6 : The Distribution of Private Hospital in Malaysia 2013

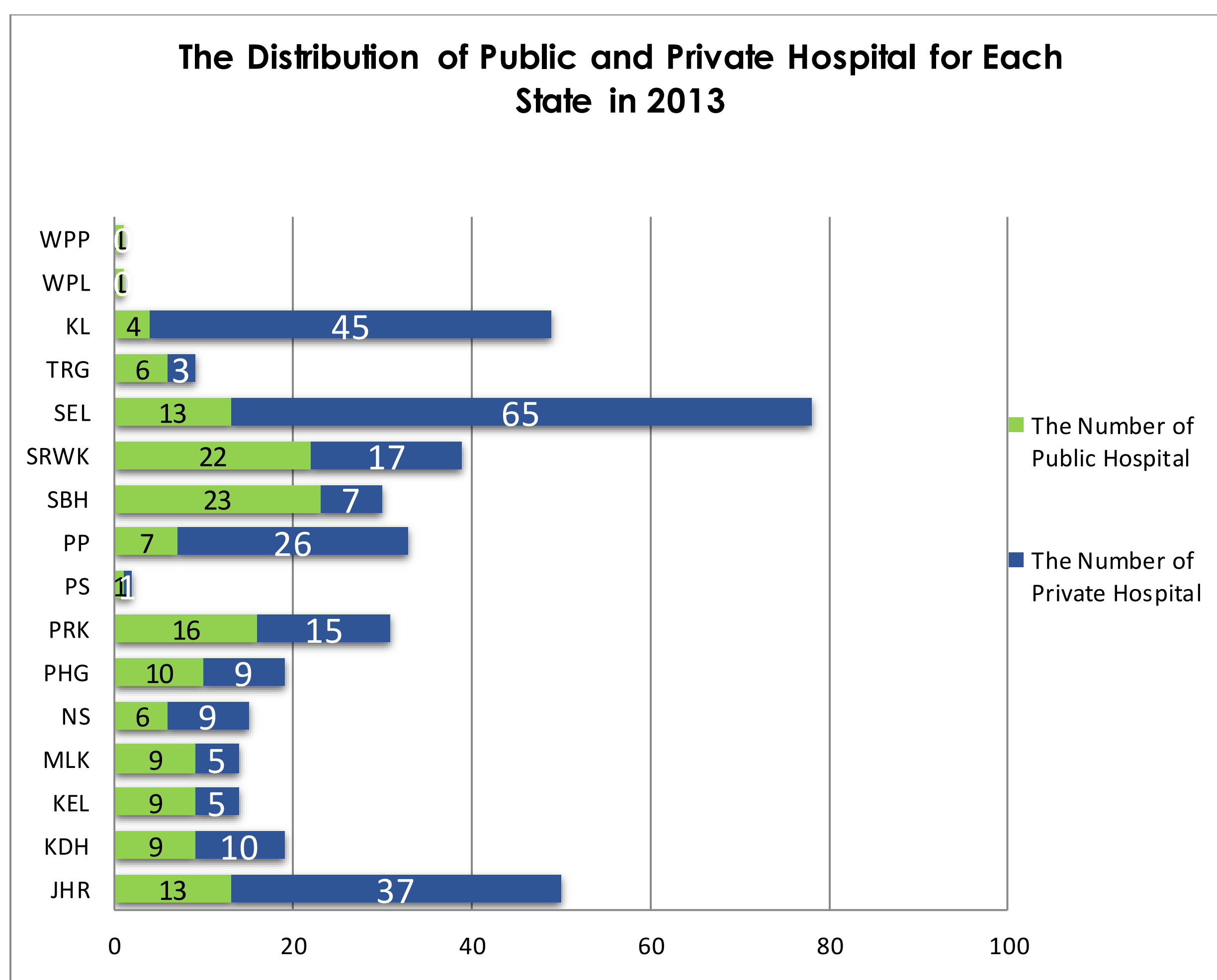




Source: MOH

Similarly, most primary health care is offered in urban areas, while the public primary health care facilities are mainly located in rural areas. There are 6,442 private clinics compared to 2,833 Ministry of Health clinics (Table 2-5), although private clinics are mainly small practices with single practitioner or few with small group arrangements[13]. This is similar with the private dental clinics. Reported by the WHO in 2013, about 80% of the private dental clinics are single-practitioner practices and about 45% of private dental clinics are in urbanized states of Selangor and the Federal Territories of Kuala Lumpur and Putrajaya.

Figure 2.7 : The Distribution of Public and Private Hospital for each State Malaysia 2013



Source: MOH

[13] World Health Organisation (WHO) on behalf of Asia Pacific Observatory on Health Systems and Policies (2013) Malaysia Health System Review

Table 2.5 : Primary care health facilities, 2010

Primary care health facility	2010		2013	
	MoH	**Private**	**MoH**	**Private**
Health clinics[1]	2,833	6,442	2,860	6,801
Health clinics (1 Malaysia)	53	-	254	-
Dental clinics[2]	1,744	1,512	1,629	1,686
Source: Health Facts 2010, Health Facts 2014, and Health Indicators 2010, Ministry of Health 1: Health clinics include Community clinics (Klinik Desa) and Maternal & Child Health clinics. 2: Dental clinics exclude mobile dental clinics				

2.3.2 Trends in Health Workforce

The Country Health Plan: 10th Malaysia Plan emphasizes that for sustainable services, the health professionals in the country need to have various range and level of competencies with adequate numbers supplied. The latter is the most challenging criteria for Primary Health Care (PHC) services to ensure equity and accessibility to services. For secondary and tertiary services, the rise of new technology and new type of care requires not only adequate numbers but need to be competent with new technology and interventions. As care becomes more complex and intensive, the probability of medical errors is higher and competency of the workforce must be absolute.

The development of healthcare workforce in Malaysia is also attributable to the sound deployment of technology by the medical professionals. These investments include computer hardware and software. Online patients' reporting systems enable radiologists to transmit patients' MRI or X-ray results to doctors anywhere in the world, thus enabling more flexible medical professional services. Such facilities provide higher competitive advantage to more established practitioners, especially those operating in remote areas. Like other software, there are also compatibility issues faced by Medical Professionals. Therefore, there often include additional investment to upgrade existing systems and training on the usage of the new technology, which could be burdensome to small private clinics and facilities. Technology has also made drugs prescription easier. However, it could pose

danger to patients who could purchase freely from the internet and have the drugs consumed without prescription from any doctors or certified medical professionals. The country health system, particularly the public sector is experiencing shortages of health professionals. In 2008[14], 60% of the doctors are in the public sector but 60% of the specialists are in the private healthcare services. Although the workload per doctor in private hospitals is significantly less than in public facilities.

Figure 2.8 : Admissions and Outpatient Attendances, 2013

Admissions and Outpatient Attendances, 2013

Government

- **Ministry of Health**

Admissions[1]	
Hospitals	2,110,628
Special Medical Institutions	52,454
Outpatient Attendances	
Hospitals	19,353,222
Special Medical Institutions	268,104
Public Health Facilities	33,379,603
Day Care Attendances	
Hospitals[2]	1,189,409
Clinical Support Service Attendances	
Medical Rehabilitation (Hearing)[3]	92,109
Medical Rehabilitation (Speech)[4]	44,508
Medical Social Services[5]	83,495
Dietetic[6]	139,719
Dental Health Attendances	
Dental Clinics	10,984,728

Admissions and Outpatient Attendances, 2013

Government (contd.)

- **Ministry of Health**

Maternal & Child Health Attendances	
Ante-natal Attendances	5,794,544
Post-natal Attendances	556,852
Child Attendances	7,715,883

- **Non Ministry of Health Hospitals**

Admissions	139,545
Outpatient Attendances	2,001,530

Private Hospitals[7]

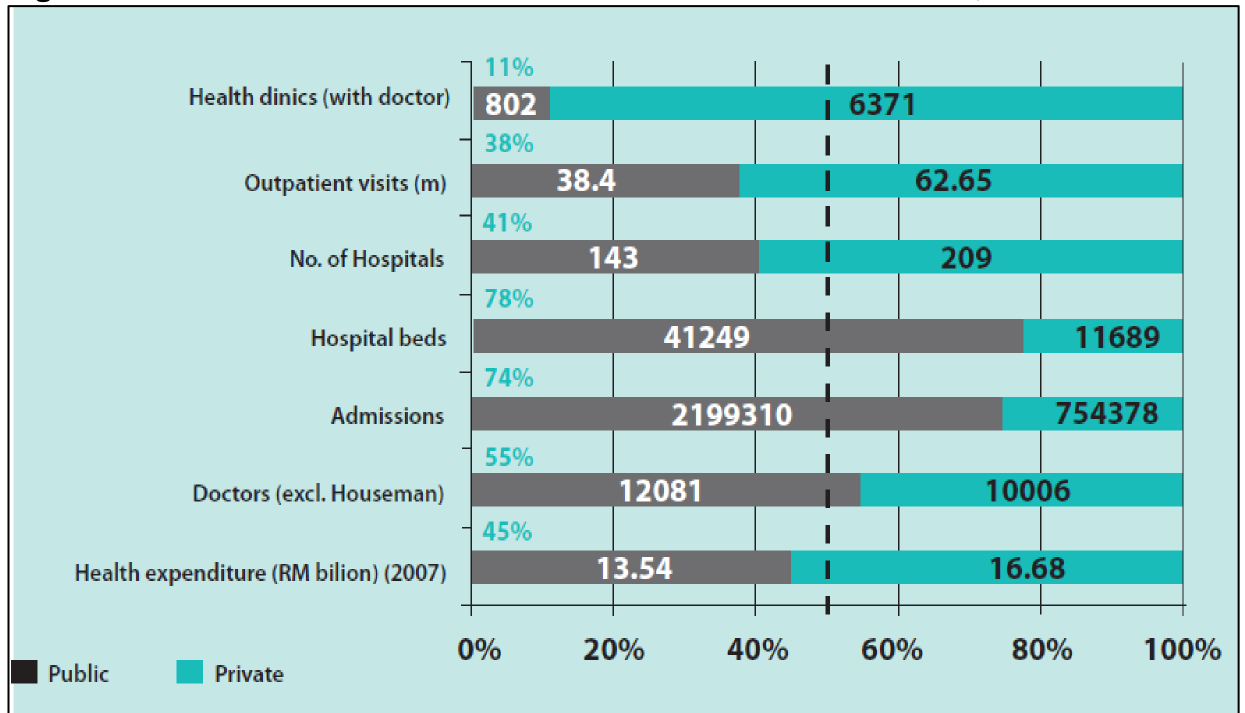
Admissions	1,020,397
Outpatient Attendances	3,867,668

[1] *Based on 93.14% response rate.*
[2] *Based on 83.94% response rate.*
[3] *Based on 91.24% response rate.*
[4] *Based on 94.78% response rate.*
[5] *Based on 61.86% response rate.*
[6] *Based on 79.90% response rate.*
[7] *Based on 97.52% response rate. Includes Private Hospitals, Private Maternity Homes, Private Nursing Homes and Private Hospice.*

Source: MOH,2013

[14] World Health Organisation (WHO) on behalf of Asia Pacific Observatory on Health Systems and Policies (2013) Malaysia Health System Review

Figure 2. 9 : Public and Private Sector Resources and Workload, 2008



Source: MOH, 2010[15]

On top of difficult working conditions in public hospitals, salaries and benefits offered by the private and international sectors are more attractive than the public sector, thus the competition in the labour market clearly favours them. The Country Health Plan further stated that there have been existing concerns on shortage of doctors in the public health sector, and imbalanced distribution in remote areas, certain states, some critical areas, and difficulty in placement and retention of doctors and nurses in these areas.

Meanwhile, the growth of the private health care sector has triggered the migration of senior doctors, specialists and experienced allied health professionals from the public sector to the private sector. The attrition rate in MOH from 2005-2008 is shown in Table 2.7 below. Stated by the MOH that some of the factors affecting the increase in attrition rate are lucrative offers from the private and international sectors, the opportunity to join institutions of higher learning as trainers or the opportunity to operate their own clinics.

[15] MOH (2010) Country Health Plan, 10th Malaysia Plan 2011-2015

Table 2.6 : Attrition among Doctors and Dentists in MOH

Category	2005	2006	2007	2008
Doctors	401	248	300	478
Dentists	56	78	107	77
Total	457	326	407	555
Source: Ministry of Health, 2010[16]				

The increase in attrition rate of senior doctors, specialists and experienced health professionals raise the uncertainty of whether the house officers and other professional's health residents receive adequate clinical exposure during the residency training. In order to achieve the status of a high income country, it is vital for Malaysia to have an increase in the density of health workforce *(see the comparison of the density of health workforce in Malaysia with the high income country and the global rate in Table 2-7)*. Despite the attempt to match the global/high income country rate (by increasing the number of medical graduates), number of training placement in the country remain statics. In 2013, Dr Milton Lum (MMC member and senior medical practitioner) stated that less than 50 hospitals in the country are equipped with the necessary training facilities[17]. The most apparent impact would be the increase in probabilities of unemployment of medical graduates

Oversupply of nursing students are also one of the major concerns in healthcare sector. In 2010, 54% of the private nursing diploma graduates faced difficulties in finding job three to four months after graduating, compared to 21.7% in 2008 while many of the degree graduates are working in the sector with salary of less than the norm, i.e. being paid with the salary scale of diploma holders. While the production of graduates in healthcare sector keeps on increasing, Malaysia is still lagging behind of the goal for a high income country *(refer to the table 2-7).* This might be due to the quality of graduates produced and insufficient training placement/work place.

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[16] MOH (2010) Country Health Plan, 10th Malaysia Plan 2011-2015
[17] Chin, C., (2013) Too many doctors, too little training, The Star, 18 August. Available at: http://www.thestar.com.my/News/Nation/2013/08/18/Too-many-doctors-too-little-training/ [Accessed on 26 March 2015]

Table 2.7 : Density of health workforce (per 10,000 population), 2014

	Physicians	Nursing and Midwifery personnel	Dentistry personnel	Pharmaceutical personnel
Malaysia	12.0	32.8	3.6	4.3
Upper Middle Income	15.5	25.3	…	3.1
High Income	29.4	86.9	5.8	8.4
Global	14.1	29.2	2.7	4.3
Source: WHO, 2014[18]				

Healthcare professionals are also exposed to dangerous working conditions. Selangor Health Department director Dr S. Balachandran reported that they are highly at risk at contracting dangerous diseases due to the nature of their work. The recent report showed that 45 healthcare workers were infected with TB in 2014[19], causing three deaths.

Healthcare professionals also face a high rate of burnout. This is due to the common problems of inadequate staffing, high public expectations, long work hours, exposure to infectious diseases and hazardous substances, threat of malpractice litigation and the constant encounters with death and dying. Studies indicated that healthcare workers have long been known to be a highly stressful group and were worryingly associated with higher rates of psychological distress than many other workers of different sectors.

A cross-sectional study was conducted among 376 medical & medical sciences undergraduate in University Malaysia, 46% felt stress[20]. The most common stressor was worried of future followed by financial difficulties. The Star Online reported that one out of five doctors undergoing their houseman quits annually in Malaysia and some are working as waiters, running *pasar malam* stalls and even an air

[18] WHO (2014) World Health Report
[19] The Sun (2015) Healthcare workers warned against TB, The Sun Daily, 8th May, p.12
[20] The Malaysian Journal of Medical Sciences. Available at http://journal.usm.my/journal/mjms-full18-3.pdf

stewardess[21]. The resignation rate is alarming given that it costs up to RM500,000 to acquire a medical degree locally and up to RM1 million overseas. The portal reported that many newly qualified doctors were also quitting because of the longer wait to be posted as housemen. The issue will be elaborated in the Chapter 5.

Recent development has also shown that doctors operating private clinics have been forced to closure due to capped price pressure. The fees of General Practitioners (GPs) in private clinics as per Schedule 7th and 13th of the Private Healthcare Facilities and Services Act 1998 are stated as follows:-

Table 2.8 : Seventh Schedule 2006 and Thirteenth Schedule 2013

Seventh Schedule 2006: Part I-Medical Fees A. Consultation Fees 1. General Practitioners (Non specialists) *(a)* Clinic with pharmaceutical services Consultation only Consultation with examination Consultation with examination and treatment plan Consultation after stipulated clinic hours House calls or home visits *Revision has been made in 2013, and the new fees schedule has been introduced:-*	RM 10 - RM 35 Up to 50% above the usual rate Up to 100% above the usual rate
Thirteenth Schedule 2013 Consultation only Consultation with examination Consultation with examination and treatment plan	RM 30-125 Up to 50% above the usual rate Up to 100% above the usual rate

[21] The Star Online (March 30, 2015) in an article 'Housemen do not complete training stint for various reasons'. Available at http://www.thestar.com.my/News/Nation/2015/03/30/One-in-five-quit-each-year-Housemen-do-not-complete-training-stint-for-various-reasons/

Consultation after stipulated clinic hours House calls or home visits	
Source: Schedule 7th and 13th of Private Healthcare Facilities and Services Act 1998 (Regulations 2006)	

However MCO's rate for panel clinics still does not reflect the change in the schedule thirteenth as mentioned by some doctors that were interviewed. General panel practitioners have been capped to a RM30 to RM35 claimable fees for both consultation and medicine prescribed to patients registered under these MCOs. Such trading practices may lead to the issues faced by private doctors as per the situation mentioned above. More of this will be discussed in Chapter 6.